

# WA State Consolidated Technology Services State Data Center Projects

Prepared By:	Consolidated Technology Services
Date: 7/09/2013	Period Covered: August 19 – August 30

## Project Dashboard

	Scope	Schedule	Budget
<b>Project Name</b>			
<b>SDC Program</b>			
<b>OB2 Heat Reduction</b>	(completed)		
<b>SDC Facilities Build out</b>	(completed)		
<b>SDC Network Core Infrastructure</b>	(completed)		
<b>SDC Firewall Infrastructure</b>	(completed)		
<b>SDC Storage Infrastructure</b>	(completed)		
<b>CTS Cloud POC</b>			
<b>CTS Move Phase 1</b>			
<b>Virtual Tape Library</b>			
<b>CTS Move Phase 2</b>			
<b>OB2 Data Center Optimization</b>			
<b>WSP Migration (Ph 1)</b>			

	Baseline Budget as of 12/2012	Actuals as of 8/31/2013
<b>Phase</b>	<b>Budget</b>	<b>Actuals</b>
SDC Program	\$5,850,823	\$2,668,226
OB2 Heat Reduction	\$0	
SDC Facilities Build out	\$4,908,217	\$4,154,003
SDC Network Core Infrastructure	\$8,592,141	\$7,903,212
SDC Firewall Infrastructure	\$3,671,579	\$1,290,150
SDC Storage Infrastructure	\$4,294,613	\$3,265,609
CTS Cloud POC	\$1,000,000	\$309,154
CTS Move Phase 1	\$6,652,507	\$1,556,381
Virtual Tape Library	\$1,950,000	
CTS Move Phase 2	\$2,691,811	
OB2 Data Center Optimization	\$1,500,000	
WSP Migration (Ph 1)	\$2,000,000	
<b>Total</b>	<b>\$43,111,691</b>	<b>\$21,146,735</b>

This graphic shows the baseline budget for all SDC projects  
(includes both implementation costs and 5-yr maintenance commitments).

### Scope Key:

- G = No issues are impacting scope
- Y = Issues are being tightly managed, but may impact scope
- R = Unresolved issues are preventing progress of identified scope

### Schedule Key:

- G = On schedule
- Y = Key milestones are more than 2 weeks late
- R = Key milestones are more than 8 weeks late

### Budget Key:

- G = Planned spending is within 5% to 10% of agreed upon budget
- Y = Planned spending is within 11% to 20% of agreed upon budget
- R = Planned spending is greater than 20% of agreed upon budget

\* Firewall budget/actuals continue beyond implementation to span the first maintenance cycle.

## SDC Projects Status

Project	Planned for Next Reporting Period (August 19 – August 30)	Status of Work Performed this Reporting Period (August 19 – August 30)	Planned for Next Reporting Period (September 2 – September 13)
<b>SDC Program</b>	<ul style="list-style-type: none"> <li>Continue reviewing existing Design Decisions for SDC Business Plan impacts</li> <li>Continue work on facilities procedures</li> <li>Continue to work on Design Decisions               <ul style="list-style-type: none"> <li>SDC-044 VRF Strategy Implementation</li> <li>SDC-045 CTS Services VRF</li> <li>SDC-046 LTS PBX</li> <li>SDC-047 DMZ VRF</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Review of Design Decisions #1-11 and #35-41 for SDC Business Plan impacts.</li> <li>Completed support on facilities procedures</li> <li>Continued to work on Design Decisions               <ul style="list-style-type: none"> <li>SDC-044 VRF Strategy Implementation</li> <li>SDC-045 CTS Services VRF</li> <li>SDC-046 LTS PBX</li> <li>SDC-047 DMZ VRF</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Review Design Decisions #12-34 for SDC Business Plan impacts</li> <li>Continue to work on Design Decisions               <ul style="list-style-type: none"> <li>SDC-044 VRF Strategy Implementation</li> <li>SDC-045 CTS Services VRF</li> <li>SDC-046 LTS PBX</li> <li>SDC-047 DMZ VRF</li> </ul> </li> </ul>
<b>SDC Facilities</b> Prepare the SDC facility for customers. Includes preparing the critical environment (electrical/mechanical), floor space and physical security for customers.	<ul style="list-style-type: none"> <li>Updates made to the DRAFT SDC Physical Security Policy and submitted back to HR for review.</li> <li>Work on a communication plan for implementing Draft Standard Operational Procedures (SOP's) 1.0 for space management.</li> <li>Work Plans (MOPs) are being evaluated and approved for Provider and Support Space construction as needed. Provider space is on track for completion on October 1st 2013.</li> <li>Review the bill of materials for Data Hall 1 phase 3 enclosures build out and Power infrastructure.</li> <li>Continue work on defining the requirements for completing the DH-2 portion of the high level design.</li> </ul>	<ul style="list-style-type: none"> <li>Completed updates to the DRAFT SDC Physical Security Policy and awaiting approval from HR</li> <li>Continued work on a communication plan for implementing Draft Standard Operational Procedures (SOP's) 1.0 for space management.</li> <li>Evaluated Work Plans (MOPs) and approved for Provider and Support Space construction as needed. Provider space is on track for completion on October 1st 2013.</li> <li>Continued reviewing and approve the bill of materials for Data Hall 1 phase 3 enclosures build out and Power infrastructure.</li> <li>Continued work on defining the requirements for completing the DH-2 portion of the high level design.</li> </ul>	<ul style="list-style-type: none"> <li>Receive approval on DRAFT SDC Physical Security Policy from HR</li> <li>Continued Work on a communication plan for implementing Draft Standard Operational Procedures (SOP's) 1.0 for space management.</li> <li>Work Plans (MOPs) are being evaluated and approved for Provider and Support Space construction as needed. Provider space is on track for completion on October 1st 2013.</li> <li>Complete Bond fund decision package and gain approval to order Data Hall 1 phase 3 enclosures build out and Power infrastructure.</li> <li>Continued work on defining the requirements for completing the DH-2 portion of the high level design.</li> </ul>
<b>SDC Network Core Phase 2</b> Establish the network core in the SDC Data Hall 2.	<ul style="list-style-type: none"> <li>Project initiation activities planned</li> </ul>	<ul style="list-style-type: none"> <li>No activity during this reporting period</li> </ul>	<ul style="list-style-type: none"> <li>Project initiation activities planned</li> </ul>
<b>SDC Storage Infrastructure</b> The optimized storage solution was implemented in April 2013. Close-out tasks underway include production monitoring and portal deployment.	<ul style="list-style-type: none"> <li>Continue developing a Statement of Work for the Watch4Net implementation – <i>expected completion by August 30, 2013</i></li> <li>Continue documenting Service Level Objectives – <i>expected completion by September 16, 2013</i></li> </ul>	<ul style="list-style-type: none"> <li>Continued Statement of Work for the Watch4Net implementation in review by EMC</li> <li>Continued documenting Service Level Objectives – <i>expected completion by September 16, 2013</i></li> </ul>	<ul style="list-style-type: none"> <li>Continue Statement of Work for Watch for Net implementation. Estimate completion by end of Sept.</li> <li>Continue documenting Service Level Objectives – <i>expected completion by September 16, 2013</i></li> <li>EMC resident will be onsite in Sept to assist with Storage Health Check/Tuning, Performance Monitoring, Customized Reporting, and Storage Operations</li> </ul>

Project	Planned for Next Reporting Period (August 19 – August 30)	Status of Work Performed this Reporting Period (August 19 – August 30)	Planned for Next Reporting Period (September 2 – September 13)
<b>Cloud Utility Servers Project</b> Refresh Server Provisioning infrastructure and provide a cloud utility platform for CTS customers.	<ul style="list-style-type: none"> <li>Validate documents submitted by VMware regarding Use Case Definitions, Architectural Design, Configuration Workbook, Logical Cloud Design and Installation and Configuration Procedures</li> </ul>	<ul style="list-style-type: none"> <li>Continued validating final documents submitted by VMware regarding Use Case Definitions, Architectural Design, Configuration Workbook, Logical Cloud Design and Installation and Configuration Procedures.</li> </ul>	<ul style="list-style-type: none"> <li>Prepare for Cloud PoC Wrap-Up Phase to include sign off of final documentation</li> </ul>
<b>CTS Move Phase 1</b> Move selected CTS equipment that best alleviates the heat issue in OB2.	<ul style="list-style-type: none"> <li>Physical Moves <ul style="list-style-type: none"> <li>Return IBM Chassis from OB2 to Lab</li> <li>Move servers in physical move group 14 and SGN Cluster Host 10</li> </ul> </li> <li>Virtual Moves <ul style="list-style-type: none"> <li>Move servers in virtual move groups 22-26</li> </ul> </li> <li>Schedule internal meeting to discuss Exchange migration onto the new F5 Load Balancers</li> </ul>	<ul style="list-style-type: none"> <li>Physical Moves <ul style="list-style-type: none"> <li>77 of 111 physical servers have been moved to date</li> <li>Returned IBM Chassis to the Lab</li> <li>Migrated physical move groups 14 and SGN Cluster Hosts 10, 2 and 3 to the SDC</li> </ul> </li> <li>Virtual Moves <ul style="list-style-type: none"> <li>209 of 373 virtual servers have been moved to date</li> <li>Successfully migrated Virtual Move Groups 22-26</li> </ul> </li> <li>Scheduled internal meeting to discuss Exchange migration onto the new F5 Load Balancers</li> </ul>	<ul style="list-style-type: none"> <li>Physical Moves <ul style="list-style-type: none"> <li>Prepare to move LNI physical group 15</li> </ul> </li> <li>Virtual Moves <ul style="list-style-type: none"> <li>Move servers in virtual move group 27</li> <li>Prep for migrations of LNI virtuals and CSD MGT Cluster 1 &amp; 2</li> </ul> </li> <li>Exchange load balancer migration is tentatively scheduled for 10/27</li> </ul>
<b>WSP Migration (Ph 1)</b> Plan and execute the first phase of migrating the WSP data center to the SDC.	<ul style="list-style-type: none"> <li>Continue reviewing options for WSP core network connectivity in the SDC.</li> <li>Continue work on SLA.</li> </ul>	<ul style="list-style-type: none"> <li>Continued reviewing options for WSP core network connectivity in the SDC.</li> <li>Continued work on SLA.</li> <li>Updated airflow configuration.</li> </ul>	<ul style="list-style-type: none"> <li>Continue reviewing options for WSP core network connectivity in the SDC.</li> <li>Continue work on SLA.</li> </ul>
<b>Virtual Tape Library Disaster Recovery (VTL)</b> Procure additional VTL equipment to eliminate the tape backup system and support mainframe disaster recovery.	<ul style="list-style-type: none"> <li>Continue to develop high level design - <i>expected completion by Sept 30, 2013</i></li> <li>Continue to review/revise project charter – <i>expected completion by Sept 6, 2013</i></li> <li>Complete documenting requirements – <i>expected complete by August 30, 2013</i></li> <li>Continue to determine procurement strategy</li> </ul>	<ul style="list-style-type: none"> <li>Continued to develop high level design - <i>expected completion by Sept 30, 2013</i></li> <li>Continued to review/revise project charter – <i>expected completion by Sept 13, 2013</i></li> <li>Completed documenting requirements</li> <li>Continued to determine procurement strategy</li> </ul>	<ul style="list-style-type: none"> <li>Continue to develop high level design - <i>expected completion by Sept 30, 2013</i></li> <li>Project charter signed</li> <li>Procurement strategy determined</li> </ul>
<b>CTS Move Phase 2</b> Continue the progress of Phase 1 by moving additional CTS equipment to the SDC.	<ul style="list-style-type: none"> <li>Continue to confirm equipment inventory to inform the schedule and budget process</li> </ul>	<ul style="list-style-type: none"> <li>Continued to confirm equipment inventory to inform the schedule and budget process</li> </ul>	<ul style="list-style-type: none"> <li>Continue to confirm equipment inventory to inform the schedule and budget process</li> </ul>

<b>Project</b>	<b>Planned for Next Reporting Period (August 19 – August 30)</b>	<b>Status of Work Performed this Reporting Period (August 19 – August 30)</b>	<b>Planned for Next Reporting Period (September 2 – September 13)</b>
<b>OB2 Data Center Optimization</b> Reconfigure remaining equipment in OB2 to optimize airflow and cooling.	<ul style="list-style-type: none"> <li>No activity planned for next reporting period.</li> </ul>	<ul style="list-style-type: none"> <li>No activity planned for next reporting period.</li> </ul>	<ul style="list-style-type: none"> <li>No activity planned for next reporting period.</li> </ul>

### External Project Collaboration

<b>External Project</b>	<b>Planned for Next Reporting Period (August 19 – August 30)</b>	<b>Status of Work Performed this Reporting Period (August 19 – August 30)</b>	<b>Planned for Next Reporting Period (September 2 – September 13)</b>
<b>NAS</b> Design and implement a new NAS gateway to replace the legacy EMC Cellerra NAS.	<ul style="list-style-type: none"> <li>Continue working on the Installation Worksheets and send to vendor</li> <li>Production hardware installation and configuration is scheduled for Aug 26<sup>th</sup></li> </ul>	<ul style="list-style-type: none"> <li>Continued working on the Installation Worksheets and send to vendor</li> <li>Completed production hardware installation and configuration</li> </ul>	<ul style="list-style-type: none"> <li>Continued working on the Installation Worksheets and send to vendor - Completed</li> </ul>
<b>Firewall Migrations</b> Migrate 95+ firewalls to the SDC	<ul style="list-style-type: none"> <li>Continue scheduling cutovers for MPLS complex firewalls</li> <li>Continue working on follow up meeting with partner firewall customers.</li> <li>Schedule Border FW migration walk-through with customers</li> <li>Prep for cutover Firewall cutover on 9/12.</li> <li>Cut over PGN VRF on 8/21.</li> </ul>	<ul style="list-style-type: none"> <li>Continued scheduling cutovers for MPLS complex firewalls</li> <li>Continued working on follow up meeting with partner firewall customers.</li> <li>Scheduled Border FW migration walk-through with customers</li> <li>Continued to prep for cutover Firewall cutover on 9/12.</li> <li>Rescheduled and successfully cutover PGN VRF on 8/28.</li> </ul>	<ul style="list-style-type: none"> <li>Continue scheduling cutovers for MPLS complex firewalls</li> <li>Continue working on follow up meeting with partner firewall customers.</li> <li>Continue to prep for Firewall cutover on 9/12.</li> <li>Prep for firewall cutover on 9/4</li> </ul>
<b>Data Migrations</b>	<ul style="list-style-type: none"> <li>Migrate IBM Mainframe data</li> <li>Migrate FamLink Prod</li> <li>Complete LNI onboarding</li> </ul>	<ul style="list-style-type: none"> <li>Didn't complete IBM Mainframe data migration</li> <li>Completed FamLink Prod migration</li> <li>Continued working on LNI onboarding</li> <li>Completed Unisys Mainframe</li> </ul>	<ul style="list-style-type: none"> <li>Complete IBM Mainframe data migration</li> <li>Prepare LNI storage</li> </ul>

**Top Issues \***

**Issue Key:** *Green* = Issue does not require action within 30 days, *Yellow* = Issue requires action within 30 days, *Red* = Issue requires action within 10 days or less

Issue #	Summary Description	Assigned	Priority (R,Y,G)	Opened Date/by	Next Review Date	Target Resolution Date	Comments/Resolution	Status
252	Need to finalize the strategy for the TSD\LTS PBX and supporting infrastructure migration	Molly/Dan	G	8/13/13	10/16/13	TBD	LTS documented the options and associate costs to help determine the migration strategy.	Open
253	Need to define strategy for migration of remaining TSD Networking Infrastructure, particularly K20.	Molly/Dan	G	8/13/13	10/16/13	TBD	The strategy for migrating K20 out of OB2 needs to be documented.	Open

**Issues Closed this Period**

Issue #	Summary Description	Assigned	Priority (R,Y,G)	Opened Date/by	Next Review Date	Target Resolution Date	Resolution	Status
251	Need to finalize the Unisys enclosure strategy	Doug	G	8/13/13	9/18/13	9/18/13	The mainframes will move intact in current enclosure with cabling remediation where necessary.	Closed
249	TSM back-up speed slow and may impact migrations.	Gordon	G	8/08/13	8/31/13	8/31/13	Cause was confirmed and work to resolve the issue was completed on August 25 <sup>th</sup> .	Closed

**Change Requests \***

No.	Description	Requestor	Request Date	Assigned	Cost Impact	Schedule Impact	Status
	N/A						

Status (Submitted, Proposal, Approved, Opened, Resolved, Verified, Closed)

**Top 5 Risks \***

ID	Risk Description	Risk Category	Level of Impact	Likelihood	Schedule	Ability to Meet Deadline	Risk Mitigation Comment	Due Date & Action	Assigned To
1	Customers that were expecting to come into the SDC right away must now wait longer, which has end of life/investment implications	Man	3	R	G	G	Communicate with customers the new plan and schedule.	Ongoing	Program Manager
2	Timing may force a need to place hardware in OB2, which has an adverse impact on the heat reduction effort.	Cap	2	Y	G	G	<ul style="list-style-type: none"> <li>Work with customers to identify solutions that minimize additional heat in OB2.</li> <li>Institute OB2 heat reduction initiatives to turn off unused servers</li> <li>Delay implementation of new hardware in OB2 as late as possible</li> </ul>	Ongoing	Facilities
3	Because the project is large and includes substantial logistical challenges involving multiple projects/agencies, interdependencies will be complex and could be overlooked.	Man	1	R	G	G	<ul style="list-style-type: none"> <li>Apply project management practices to manage the effort.</li> <li>Break the work down into small and logical units.</li> <li>Use tools to track tasks, dependencies, issues, risks, etc. and automate the planning and communications as much as possible.</li> <li>Implement migration approaches that minimize impacts of system dependencies, such as spanning the network between the OB2 and SDC data centers.</li> <li>Use development and test platforms to verify system dependencies.</li> </ul>	Ongoing	Sr. Project Manager
4	Even though the scope has been reduced to better match the budget, it may be insufficient. Several items remain unfunded.	Res	1	R	G	G	<ul style="list-style-type: none"> <li>Request funding for unfunded projects</li> <li>Identify other funding sources (if possible)</li> <li>Reduce project scope</li> <li>Back-log unfunded projects</li> </ul>	Ongoing	Program Manager
5	Resource Conflict – Program relies on functional staff with competing priorities.	Res	1	R	G	Y	<ul style="list-style-type: none"> <li>Provide clear management guidance on priorities and carefully manage functional staff to minimize conflicts in priorities and work tasks.</li> <li>Expand resource management and track task assignments to the resource level. Identify areas in the plan where resource loading indicates a problem and take appropriate action.</li> </ul>	Ongoing	Sr. Project Manager

**Risk Category** = (Res)ources; (Man)agement; (Tec)hnology; (Fun)ctional; (Dev)elopment; (Int)erfaces; (Sec)urity; (Usa)bility; (Ava)ilability; (Per)formance; (Cap)acity; (Sca)lability; (Ext)ernal.

**Level of Impact Key:**

1=major impact  
2=significant impact  
3=minor impact  
0=no impact

**Likelihood Key:**

**G** = Low.  
**Y** = Moderate  
**R** = High

**Schedule Key:**

**G** = on schedule  
**Y** = Less than 30 days behind schedule (caution)  
**R** = More than 30 days behind schedule (warning)

**Ability to Meet Deadline Key:**

**G** = based on current information, it appears manageable  
**Y** = there are significant obstacles or areas of uncertainty or concerns  
**R** = there are clearly identifiable threats or deterioration of ability to manage and control

**Steering Committee Action Items**

Item #	Item Description	Assigned	Date Assigned	Date Due
	N/A			